

Notice of Allowability

Application No.

09/781,730

Examiner

John L. Goff

Applicant(s)

FARQUHAR ET AL.

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed 9/14/05.
2. ☒ The allowed claim(s) is/are 23,25,32,35,64 and 75.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 11072005.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jack Friedman on 11/7/05.

2. The application has been amended as follows:

In the Specification:

3. On page 1, A¹ after "June 29, 1999" insert - - now U.S. Patent 6,254,972 - -.

In the Claims:

4. In claim 23, line 2 after "particles therein" insert - - , the matrix formed by casting a dispersion in which both the fluoropolymer matrix and inorganic particles are introduced in a liquid - -.
5. In claim 64, line 1 delete "61" and insert therein - - 23 - -.
6. Add new claim 75, - - The method of claim 23, wherein the thermosetting resin includes a contrasting dye - -.
7. Claims 1-22, 24, 26-31, 33, 34, 36-63, and 65-74 are cancelled.
8. Claims 23, 25, 32, 35, 64, and 75 are allowed.

REASONS FOR ALLOWANCE

9. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest a method of forming a device comprising forming a dispersion of a fluoropolymer and inorganic particles in a liquid, casting the dispersion to form a non-fibrillated fluoropolymer matrix, coating a first thermosetting resin on the non-fibrillated fluoropolymer matrix such that the resin impregnates the matrix and remains on a surface of the matrix, providing a conductor, coating a second thermosetting resin on a surface of the conductor, and laminating the non-fibrillated, resin-impregnated fluoropolymer matrix to the conductor.

It is noted "fibrillating" a fluoropolymer matrix includes applying a shear stress to the matrix to form fibrils or fibers on the fluoropolymer within the matrix (Column 1, lines 23-26 and Column 2, lines 17-28 of Ree et al., U.S. Patent 4,153,661 and Column 7, lines 21-27 of Swei et al., U.S. Patent 5,374,453). Thus, providing a "non-fibrillated" fluoropolymer matrix as required by the claims requires providing a fluoropolymer matrix that has not had an applied shear stress forming fibrils or fibers on the fluoropolymer within the matrix. Regarding Johnson (U.S. Patent 4,747,897), it is noted that while the fluoropolymer matrix taught by Johnson is not fibrillated the matrix is formed of woven fluoropolymer fibers and not cast from a dispersion of fluoropolymer, inorganic particles, and liquid. Regarding Swei et al., it is noted that while the fluoropolymer matrix taught by Swei et al. is cast from the claimed dispersion the dispersion is cast directly on the conductor there being no suggestion to cast the dispersion to form a fluoropolymer matrix, impregnate the formed matrix with a thermosetting resin, and then laminating the as formed resin-impregnated matrix to the conductor.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is (571) 272-1216. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



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